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09/758,361	01/12/2001	Hiroshi Murakami	018987-031	9455

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EXAMINER	
DIVINE, LUCAS	
ART UNIT	**PAPER NUMBER**
2624	

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/758,361	MURAKAMI ET AL.	
	Examiner	Art Unit	
	Lucas Divine	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *11* is/are allowed.

6)☒ Claim(s) *1-10 and 12-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 1 – 33 are pending.

Response to Arguments

2. Applicant's arguments with respect to claim 1 – 10 and 12 – 30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minamizawa (US 5748337) in view of well known prior art.

Regarding claim 13, Minamizawa teaches a printer controller (PRINT CPU 90 and FAX CPU 80 are controllers that perform control over fax device 2 in order to receive jobs and print them in image forming unit 26, Fig. 3) that receives print jobs transmitted from a plurality of terminals (jobs can come from other fax devices or from a computer; col. 1 lines 43-44, col. 4 lines 4-15), and instructs a printer to perform print processing, the printer controller comprising:

memory that stores each received print job in correspondence with information indicating a transmission origin terminal (Fig. 3, FAX RAM 84 and PRINT RAM 94 are memory that store received jobs);

a first timer that measures, for each terminal, an elapsed time since a print job was last received (col. 1 lines 55-58 and col. 8 line 9, wherein a timeout occurs when a terminal does not send data in a time period, a timer inherent to a timeout operation);

a priority determining unit that determines a priority level for each terminal according to the measured elapsed times (col. 1 lines 49-51 and col. 8 lines 8-12, wherein when a timeout occurs for a terminal because it hasn't sent data, the higher priority of that terminal is released); and

a controller that instructs the image forming unit to process the plurality of print jobs stored in the memory in an order based on the determined priority levels (PRINT CPU 90 and FAX CPU 80 in Fig. 3 control the device to print jobs based on which mode/terminal [fax or computer] is selected, Fig. 7 shows printing of data based on terminal priorities).

While Minamizawa teaches the print job is received via a fax or other connection, Minamizawa does not specifically teach the print job has corresponding origin terminal information.

However, Examiner takes Official Notice that well known prior art teaches that printing systems such as Minamizawa can include TCP/IP or other type networks that include origin terminal information in their transmission packets. Thus, the printing device would receive the print job with information including its origin terminal.

It would have been obvious to one of ordinary skill in the art that the system of Minamizawa could have been implemented in a networking system that uses packets. The motivation for doing so would have been to allow remote networked users to use the printing

device. Other motivations for developing printing systems over the Internet are well known in the art.

Regarding claim 17, Minamizawa teaches an image forming apparatus (Fig. 2) for receiving print jobs from a plurality of terminals (jobs can come from other fax devices or from a computer; col. 1 lines 43-44, col. 4 lines 4-15), the image forming apparatus comprising:

an image forming unit that performs print processing corresponding to the received print jobs (Fig. 3 ref. no. 26);

memory that stores each received print job in correspondence with information indicating a transmission origin terminal (Fig. 3, FAX RAM 84 and PRINT RAM 94 are memory that store received jobs);

a first timer that measures, for each terminal, an elapsed time since a print job was last received (col. 1 lines 55-58 and col. 8 line 9, wherein a timeout occurs when a terminal does not send data in a time period, a timer inherent to a timeout operation);

a priority determining unit that determines a priority level for each terminal according to the measured elapsed times (col. 1 lines 49-51 and col. 8 lines 8-12, wherein when a timeout occurs for a terminal because it hasn't sent data, the higher priority of that terminal is released); and

a controller that instructs the image forming unit to process the plurality of print jobs stored in the memory in an order based on the determined priority levels (PRINT CPU 90 and FAX CPU 80 in Fig. 3 control the device to print jobs based on which mode/terminal [fax or computer] is selected, Fig. 7 shows printing of data based on terminal priorities).

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It would have been obvious to one of ordinary skill in the art that the system of Minamizawa could have been implemented in a networking system that uses packets. The motivation for doing so would have been to allow remote networked users to use the printing device. Other motivations for developing printing systems over the Internet are well known in the art.

4. Claims 1 – 5 and 7 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muto (US 6137587) in view of Noda (US 6897972).

Regarding claim 1, Muto teaches a printer controller (CPU 12, Fig. 4, controls the printer) that receives print jobs transmitted from a plurality of terminals (Fig. 4, terminals 3000, job received in S1401, Fig. 14), and instructs a printer to perform print processing (Fig. 14, S1405), the printer controller (steps shown in Fig. 14 are program steps that are executed by the controller as distinct and separate actions; see col. 13 lines 60-64) comprising:

a detector that detects pieces of operation information (Fig. 14, S1401, wherein the print information includes information regarding a predetermined time since the user has used the machine; col. 14 lines 22-25 and lines 30-31), each relating to a current operation of one of the

plurality of terminals (col. 14 lines 22-25 and 30-31, Fig. 17B, wherein whether or not the user is operating the host computer frequently [operating state of use/non-use] determines what the print priority should be);

a priority determining unit that determines priority levels for a plurality of print jobs waiting to be printed (Fig. 14 S1402, col. 14 lines 1-3, which uses table 1700, Fig. 17B, that is updated in S1406, col. 14 lines 15-34, wherein the priority of a print job is determined based on what host the job is from), a priority level of a print job determined based on a piece of operation information detected by the detector (operation information including predetermined period of time and frequency of use is used to determine priority order; col. 14 lines 21-22 and 31-32) from a terminal that transmitted the print job (col. 14 line 24, wherein the information can come from the host computer); and

a controller that instructs the printer to process the plurality of print jobs in an order based on the determined priority levels (Fig. 14 S1405, Fig. 4 printing unit 17, wherein the job that has been determined as highest priority is outputted as instructed by the CPU 12 controlling the printer).

Muto does not specifically teach that the pieces of operation information (included in print information) relates to a user's current manual operation of one of the plurality of terminals.

However, Noda teaches that print information relates to a user's current manual operation of the terminal because the user manually initiates the print job (see Fig. 7 and col. 4 lines 44-48).

It would have been obvious to one of ordinary skill in the art that the print jobs including print information of Muto could have related to the user manually operating the terminal to

initiate the job. This is standard practice in all of the printing art to let a user initiate printing of their job and the motivation clearly is to let users print when they want to print, by hitting print buttons like 707 of Noda.

Regarding claim 2, which depends from claim 1, Muto further teaches the detector detects, as the piece of operation information, a non-operational period during which the terminal has not been operated (col. 14 lines 21-22, predetermined period of time since last use).

Regarding claim 3, which depends from claim 2, Muto further teaches the priority determining unit sets a higher priority level for (a) a print job from a terminal with a non-operational period that exceeds a specified value than for (b) a print job from a terminal with a non-operational period that is no more than the specified value (Fig. 17B, col. 14 lines 31-32, wherein host machines that have less frequency of use have a higher printing priority, for example, the 1 frequency of use of host C exceeds the *non-frequency* specified value [7] of host A and therefore has higher priority).

Regarding claim 4, which depends from claim 2, Muto further teaches the priority determining unit sets higher priority levels for print jobs from terminals with longer non-operational periods (Fig. 17B, col. 14 lines 31-32, wherein host machines that have less frequency of use have a higher printing priority).

Regarding claim 5, which depends from claim 1, Muto further teaches the detector detects each of the pieces of operation information based on a signal transmitted from each terminal (print information is inherently an electronic signal including information that travels from host 300 to printer 1500), each signal being generated when an input device for a terminal

is operated (the print information signal is generated when a user specifies a print command for printing a print job).

Regarding claim 7, Muto teaches an image forming apparatus (Fig. 4 printer 1500, as controlled by CPU 12) that receives print jobs transmitted from a plurality of terminals (Fig. 4, terminals 3000, job received in S1401, Fig. 14), and performs print processing (Fig. 14, S1405), the image forming apparatus (steps shown in Fig. 14 are program steps that are executed by the controller as distinct and separate actions; see col. 13 lines 60-64) comprising:

an image forming unit (Fig. 4 printing unit 14) that performs print processing corresponding to the received print jobs (in step S1405, Fig. 14, the printing unit 17 prints the received job [received in step S1401] specified to the CPU);

a detector that detects pieces of operation information (Fig. 14, S1401, wherein the print information includes information regarding a predetermined time since the user has used the machine; col. 14 lines 22-25 and lines 30-31), each relating to a current operation of one of the plurality of terminals (col. 14 lines 22-25 and 30-31, Fig. 17B, wherein whether or not the user is operating the host computer frequently [operating state of use/non-use] determines what the print priority should be);

a priority determining unit that determines priority levels for a plurality of print jobs waiting to be printed (Fig. 14 S1402, col. 14 lines 1-3, which uses table 1700, Fig. 17B, that is updated in S1406, col. 14 lines 15-34, wherein the priority of a print job is determined based on what host the job is from), a priority level of a print job determined based on a piece of operation information detected by the detector (operation information including predetermined period of time and frequency of use is used to determine priority order; col. 14 lines 21-22 and 31-32)

from a terminal that transmitted the print job (col. 14 line 24, wherein the information can come from the host computer); and

a controller that instructs the printer to process the plurality of print jobs in an order based on the determined priority levels (Fig. 14 S1405, Fig. 4 printing unit 17, wherein the job that has been determined as highest priority is outputted as instructed by the CPU 12 controlling the printer).

Muto does not specifically teach that the pieces of operation information (included in print information) relates to a user's current manual operation of one of the plurality of terminals.

However, Noda teaches that print information relates to a user's current manual operation of the terminal because the user manually initiates the print job (see Fig. 7 and col. 4 lines 44-48).

It would have been obvious to one of ordinary skill in the art that the print jobs including print information of Muto could have related to the user manually operating the terminal to initiate the job. This is standard practice in all of the printing art to let a user initiate printing of their job and the motivation clearly is to let users print when they wan tot print, by hitting print buttons like 707 of Noda.

Regarding claim 8, which depends from claim 7, Muto further teaches the detector detects, as the piece of operation information, a non-operational period during which the terminal has not been operated (col. 14 lines 21-22, predetermined period of time since last use).

Regarding claim 9, which depends from claim 7, Muto further teaches the detector detects each of the pieces of operation information based on a signal transmitted from each terminal (print information is inherently an electronic signal including information that travels

from host 300 to printer 1500), each signal being generated when an input device for a terminal is operated (the print information signal is generated when a user specifies a print command for printing a print job).

5. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muto and Noda as applied to claims 1 and 7 above, and further in view of Akabori et al. (US 5940582).

Regarding claims 6 and 10, which depend from claims 1 and 7, Muto does not teach an elapsed time measuring unit for measuring an elapsed time since each print job was received, wherein the priority determining unit changes the priority level of a print job when a corresponding measured elapsed time exceeds a specified value.

Akabori teaches an elapsed time since unit for measuring an elapsed time since each print job was received (Fig. 4 ref. nos. 83 and 84 and Fig. 12 ref. no. 231 and Fig. 21, wherein timers tracking the arrival, current wait time, and execution time for all jobs for use in timing calculations taught throughout Akabori -- calculation examples at col. 8 lines 4 and 49 and col. 10 line 8 -- are implied in the disclosed invention), wherein the priority determining unit changes the priority level of a print job when a corresponding measured elapsed time exceeds a specified value (Fig. 12 ref. nos. 233 and 236, wherein a job is given interrupt priority if the specified end time is exceeded).

It would have been obvious to one of ordinary skill in the art to include the print job timing system of Akabori in the printing system of Muto and Noda. The motivation for doing so would have been to allow the user more control over the timing of their print jobs and to allow the oldest jobs in the system to be completed. Thus, a fair printing system can be attained where one user does not have to worry about their job being held forever.

6. Claim 12 is rejected under 35 U.S.C. 102(e) as being anticipated by Fresk et al. (US 6026258) and Sugishima et al. (US 4797706).

Regarding claim 12, Fresk teaches a printer controller (processor 54, Fig.2, col. 5 lines 13-14) that receives print jobs transmitted from a plurality of terminals (Fig. 1, terminals 16, 22 and 28; col. 4 lines 3-6), and controls a printer to perform print processing (printer 30, Figs. 1 and 2), the printer controller comprising:

at least one detector that detects whether an operator is in a vicinity of a terminal (col. 2 lines 64-67, Fig. 2 sensor 56, col. 5 lines 30-40)

a priority determining unit that determines priority levels for a plurality of print jobs waiting to be printed (controller gives higher priority to local jobs when a user is present; col. 3 lines 1-3 and 60-61 and col. 5 lines 3-4 and col. 5 lines 17-20), a priority level of a print job determined based on a detection result produced by the at least one detector for a terminal that transmitted the print job (col. 2 lines 38-39 and col. 3 lines 1-3, wherein the priority is sent higher for the local [at least one] detector); and

a controller that controls the printer so that the plurality of print jobs are processed in an order based on the determined priority levels (processor 58 controls the printing of jobs, including receiving the commands from the central processor 54 about which jobs get priority [i.e. the walk up jobs reserve the printer when a user is present]).

Fresk does not specifically each that every terminal has a detector.

However, Sugishima teaches that a system can be made up of entirely copying devices like 10 of Fresk (see Fig. 1 of Sugishima and Figs. 9 and their discussion, wherein a job can be originally from any of the devices and be transmitted to any or all of the other devices).

In such a system as Sugishima, if a user walks up to a copier, they would want to have their print job handled first, before network jobs, in order to not keep the user who is waiting around for longer than necessary. Thus it would have been obvious to one of ordinary skill in the art to that Fresk could have been arranged in a similar situation as that of Sugishima, and thus would have the detectors at each terminal (print data sending device).

7. Claims 14, 15, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minamizawa and well known prior art as applied to claims 13 and 17 above, and further in view of Muto.

Regarding claims 14 and 15, which depend from claim 13, Minamizawa does not specifically teach the priority determining unit sets a higher priority level for (a) a print job from a terminal with an elapsed time exceeding a specified value than for (b) a print job from a terminal with an elapsed time no more than the specified value or the priority determining unit sets higher priority levels for print jobs from terminals with longer elapsed times.

Muto teaches the priority determining unit sets a higher priority level for (a) a print job from a terminal with an elapsed time exceeding a specified value than for (b) a print job from a terminal with an elapsed time no more than the specified value (Fig. 17B, col. 14 lines 31-32, wherein host machines that have less frequency of use have a higher printing priority, for example, the 1 frequency of use of host C exceeds the *non-frequency* specified value [7] of host A and therefore has higher priority) and the priority determining unit sets higher priority levels for print jobs from terminals with longer elapsed times (Fig. 17B, col. 14 lines 31-32, wherein host machines that have less frequency of use have a higher printing priority).

It would have been obvious to one of ordinary skill in the art to give higher priority to devices and jobs that call for printing less often. The motivation for doing so would have been to more equally allow the use of the printing device. For example, if one user (high frequency user) has 100 print jobs sent to a device, and another person only has sent one (low frequency user), it would be beneficial to allow the 1 job to complete so that user can continue with their work instead of waiting for all the 100 jobs to complete of the high frequency user.

Regarding claims 18 and 19, which depend from claim 17, Minamizawa does not specifically teach the priority determining unit sets a higher priority level for (a) a print job from a terminal with an elapsed time exceeding a specified value than for (b) a print job from a terminal with an elapsed time no more than the specified value or the priority determining unit sets higher priority levels for print jobs from terminals with longer elapsed times.

Muto teaches the priority determining unit sets a higher priority level for (a) a print job from a terminal with an elapsed time exceeding a specified value than for (b) a print job from a terminal with an elapsed time no more than the specified value (Fig. 17B, col. 14 lines 31-32, wherein host machines that have less frequency of use have a higher printing priority, for example, the 1 frequency of use of host C exceeds the *non-frequency* specified value [7] of host A and therefore has higher priority) and the priority determining unit sets higher priority levels for print jobs from terminals with longer elapsed times (Fig. 17B, col. 14 lines 31-32, wherein host machines that have less frequency of use have a higher printing priority).

It would have been obvious to one of ordinary skill in the art to give higher priority to devices and jobs that call for printing less often. The motivation for doing so would have been to more equally allow the use of the printing device. For example, if one user (high frequency user)

has 100 print jobs sent to a device, and another person only has sent one (low frequency user), it would be beneficial to allow the 1 job to complete so that user can continue with their work instead of waiting for all the 100 jobs to complete of the high frequency user.

8. Claims 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minamizawa and well known prior art as applied to claims 13 and 17 above, and further in view of Akabori.

Regarding claims 16 and 20, which depend from claims 13 and 17, Minamizawa does not teach an elapsed time measuring unit for measuring an elapsed time since each print job was received, wherein the priority determining unit changes the priority level of a print job when a corresponding measured elapsed time exceeds a specified value.

Akabori teaches an elapsed time since unit for measuring an elapsed time since each print job was received (Fig. 4 ref. nos. 83 and 84 and Fig. 12 ref. no. 231 and Fig. 21, wherein timers tracking the arrival, current wait time, and execution time for all jobs for use in timing calculations taught throughout Akabori -- calculation examples at col. 8 lines 4 and 49 and col. 10 line 8 -- are implied in the disclosed invention), wherein the priority determining unit changes the priority level of a print job when a corresponding measured elapsed time exceeds a specified value (Fig. 12 ref. nos. 233 and 236, wherein a job is given interrupt priority if the specified end time is exceeded).

It would have been obvious to one of ordinary skill in the art to include the print job timing system of Akabori in the printing system of Minamizawa. The motivation for doing so would have been to allow the user more control over the timing of their print jobs and to allow

the oldest jobs in the system to be completed. Thus, a fair printing system can be attained where one user does not have to worry about their job being held forever.

9. Claims 21 – 23 and 25 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gase (US 6184996) and Tanimoto (US 6952280).

Regarding claim 21, Gase teaches a printer controller 14 that receives print jobs transmitted from a plurality of terminals (Fig. 1), and controls a printer to perform print processing (col. 3 line 30), the printer controller comprising:

memory that stores each of the received print jobs (wherein the print queue 28 is implied as stored in a memory) in correspondence with information indicating a transmission origin terminal (col. 3 lines 59-62, wherein owning terminal of a job is stored along with the job information);

a transmission control unit that transmits a request signal requesting transmission of a piece of print processing information for a print job to the transmission origin terminal (col. 3 lines 25-28, wherein the controller requests print jobs from the terminal. The transmission control unit is a separate and distinct part of the server procedure from the receiving unit below as shown in the separate functionality of transmitting requests and receiving command information); and

a controller that receives the piece of print processing information transmitted from the terminal that received the request signal (col. 3 line 28, wherein the client responds to the request signal by sending back print processing information), and controls the printer so as to perform print processing of the job, based on the received piece of print processing information (col. 3

lines 29-30, wherein the print file is printed based on the information returned from the client terminal).

While Gase teaches a printing system with print information and print jobs being printed based on priority, Gase does not specifically teach that the piece of print processing information relates to a current operation state the transmission original terminal.

However, Tanimoto teaches that the print processing information is information relates to a current operation state of the transmission original terminal (a user can designate at the printer whether the client is at a designated or non-designated client [S11]; when the job is from a client [thus the print processing information is received] the printer checks [S13] whether the relating operation state [the relating operation designation] of the client is designated or not; thus allowing priority or not on the printer for printing – thus, the print processing information relates to information at the printer of the currently set operation state of the specific client).

It would have been obvious to one of ordinary skill in the art that designating certain clients/terminals to have more access than others, thus allowing client designations in the system of Gase. The motivations for doing so would have been to allow users/terminals more access or faster printing times if it is set up that they should have it, or the system could be advantageous in not giving priority to those who shouldn't have it or don't need it. Two examples would be designating priority for a CEO's terminal and not designating priority for a mainframe that has many large jobs that aren't urgent.

Regarding claim 22, which depends from claim 21, Gase further teaches that the piece of print processing information is a piece of processing priority information indicating a processing

priority level of a print job (col. 3 lines 33-36, wherein the responding information from the client terminals are commands that rearrange print priority in the print queue 28).

Regarding claim 23, which depends from claim 22, Gase further teaches that the piece of processing priority information is input by an operator into a terminal input device (these information commands discussed in the rejection of claim 22 are generated via user operation of the client machines using the buttons 60, 62, 64, 66, and 68 in Fig. 4).

Regarding claim 25, which depends from claim 21, Gase further teaches that the transmission control unit transmits the request signal when the printer is available to process a new print job (col. 3 lines 25-30, wherein it is implied that the print controller to wait until the printer was available to request the print data information from the client terminal in order to save space at the print controller).

Regarding claim 26, the limitations of claim 26 are the same as the limitations of independent claim 21 except the limitations below. The limitations that are the same as claim 21 are taught by Gase and Muto and are rejected for the same reasons as discussed in the rejection of claim 21.

Gase further teaches an image forming apparatus 14, which includes the print controller 24, that has an image forming unit that performs print processing corresponding to the received print jobs (the image forming apparatus 14 includes an information forming unit to complete the printing of print jobs submitted to it, further shown in col. 4 lines 62-46, wherein the apparatus prints a scanned image file).

Regarding claim 27, which depends from claim 26, claim 27 includes all of the limitations of claim 22 as taught by Gase and Muto, and is therefore rejected for the same reasons as the rejection of claim 22.

Regarding claim 28, which depends from claim 26, claim 28 includes all of the limitations of claim 25 as taught by Gase and Muto, and is therefore rejected for the same reasons as the rejection of claim 25.

Regarding claim 29, Gase teaches a terminal 12 that transmits print jobs to a printer controller (col. 3 line 25, wherein it is implied for the terminal to transmit jobs that are received by the printer controller), the terminal comprising:

an information generating unit that generates a piece of print processing information indicating processing of a print job that has already been transmitted to the printer controller (col. 3 lines 27-30, wherein the client terminal generates the text information of print job that has already been sent to the printer controller in line 25);

a reception control unit that receives a request signal requesting the transmission of the piece of print processing information from the printer controller (col. 3 line 27, wherein it is implied that the client terminal has a reception control unit in order to accept the requests from the printer controller); and

a transmission control unit that transmits the piece of print processing information generated when the request signal is received, in response to the request signal (col. 3 line 29, wherein the responding is a transmission of the processing information).

While Gase teaches a printing system with print information and print jobs being printed based on priority, Gase does not specifically teach that the piece of print processing information relates to a current operation state the transmission original terminal.

However, Tanimoto teaches that the print processing information is information relates to a current operation state of the transmission original terminal (a user can designate at the printer whether the client is at a designated or non-designated client [S11]; when the job is from a client [thus the print processing information is received] the printer checks [S13] whether the relating operation state [the relating operation designation] of the client is designated or not; thus allowing priority or not on the printer for printing – thus, the print processing information relates to information at the printer of the currently set operation state of the specific client).

It would have been obvious to one of ordinary skill in the art that designating certain clients/terminals to have more access than others, thus allowing client designations in the system of Gase. The motivations for doing so would have been to allow users/terminals more access or faster printing times if it is set up that they should have it, or the system could be advantageous in not giving priority to those who shouldn't have it or don't need it. Two examples would be designating priority for a CEO's terminal and not designating priority for a mainframe that has many large jobs that aren't urgent.

Regarding claim 30, which depends from claim 29, claim 30 includes all of the limitations of claim 22 as taught by Gase and Tanimoto, and is therefore rejected for the same reasons as the rejection of claim 22.

10. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gase and Tanimoto as applied to claim 22 above, and further in view of Muto.

Regarding claim 24, which depends from claim 22, Gase and Tanimoto do not teach the priority information is the time during which an operation has not operated a terminal.

Muto teaches the piece of processing priority information is generated according to an amount of time during which an operator has not operated a terminal (col. 14 lines 21-22, predetermined period of time since last use is included in print job information which would have been obvious to include as discussed in the rejection to claim 21, which is used in the frequency of use calculations of Fig. 17A).

It would have been obvious to one of ordinary skill in the art to give higher priority to devices and jobs that call for printing less often. The motivation for doing so would have been to more equally allow the use of the printing device. For example, if one user (high frequency user) has 100 print jobs sent to a device, and another person only has sent one (low frequency user), it would be beneficial to allow the 1 job to complete so that user can continue with their work instead of waiting for all the 100 jobs to complete of the high frequency user.

11. Claims 31 – 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gase and Tanimoto as applied to claims 21, 26, and 29 above, and further in view of Noda.

Regarding claims 31 – 33, which depend from claims 21, 26, and 29, Gase and Tanimoto do not specifically teach that the pieces of operation information (included in print information) relates to a user's current manual operation of one of the plurality of terminals.

However, Noda teaches that print information relates to a user's current manual operation of the terminal because the user manually initiates the print job (see Fig. 7 and col. 4 lines 44-48).

It would have been obvious to one of ordinary skill in the art that the print jobs including print information could have related to the user manually operating the terminal to initiate the job. This is standard practice in all of the printing art to let a user initiate printing of their job and the motivation clearly is to let users print when they want to print, by hitting print buttons like 707 of Noda.

Allowable Subject Matter

12. Claim 11 is allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucas Divine whose telephone number is 571-272-7432. The examiner can normally be reached on Monday - Friday, 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Lucas Divine
Examiner
Art Unit 2624

ljd

KING Y. POON
PRIMARY EXAMINER